

# Work Order ID 67619-1

Monday, March 28, 2011 3:06:11 PM



Page 1

Item ID: D2893-1

Accept



Setup Start



Revision ID:

Stop



Item Name: 2.75 Support

19.00

Start Date: 3/28/2011 Start Qty: 20.00



Cust Item ID:

Required Date: 4/29/2011 Req'd Qty: 20.00

Customer:

Reference:

Approvals:

Process Plan:

Date:

11/03/28

Tooling:

Date:

Run Start



QC:

Date:

SPC (Y/N):

Date:

Stop



Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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Draw Nbr

Revision Nbr

D2893

Rev B

100

0.00



HAAS CNC VERTICAL MACHINING #1

HAAS 1

Memo

0.00

HAAS CNC vertical machine #1

Machine as per Folio FA081 Tumble & Deburr

SL 11/04/18

19

φ

110

0.00



QC2- Inspect parts off machine FAI/TAIB

QC

Memo

0.00

Quality Control

SL 11/04/18

19

φ

120

0.00



QC8- Inspect parts - second check

QC

Memo

0.00

Quality Control

BA 11/04/18

19

φ

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

# Work Order ID 67619

Monday, March 28, 2011 3:06:11 PM



Page 2

Item ID: D2893-1

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Setup Start



Revision ID:

Stop



Item Name: 2.75 Support

Start Date: 3/28/2011 Start Qty: 20.00



Cust Item ID:

Required Date: 4/29/2011 Req'd Qty: 20.00



Customer:

Reference:

Run Start



Approvals: Process Plan:

Date:

Tooling:

Date:

Stop



QC:

Date:

SPC (Y/N):

Date:

Sequence ID/  
Work Center ID

Operation  
Description

Set Up/  
Run Hours

Tool ID Tool # Plan Code Accept Qty Reject Qty Reject Number Insp. Stamp

130

White Gloss(Ref:4.3 5 1) per QSI005 4.3-Alum

0.00



M116644

Powdercoat

Memo

0.00

Powder Coating

Mask Inside Bore for Priming START TIME: 2:30pm OVEN TEMPERATURE: 400°F FINISH TIME: 8:00pm

19 0 M 11/04/19

140

QC3- Inspect Part Finish

0.00



QC

Memo

0.00

Quality Control

M 11 04 19 (19)

150

SprayPaint

0.00



SprayPaint

Memo

0.00

Spray Painting

Prime inside surface as per Dwg D2893 and QSI 005 4.3

M 11 04 20 (19)

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

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# Work Order ID 67619

Monday, March 28, 2011 3:06:11 PM



Page 3

Item ID: D2893-1

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Setup Start



Revision ID:

Stop



Item Name: 2.75 Support

Start Date: 3/28/2011 Start Qty: 20.00



Cust Item ID:

Required Date: 4/29/2011 Req'd Qty: 20.00



Customer:

Reference:

Run Start



Approvals: Process Plan: Date:

Tooling:

Date:

Stop



QC: Date:

SPC (Y/N):

Date:

Sequence ID/  
Work Center ID

Operation  
Description

Set Up/  
Run Hours

Tool ID

Tool #

Plan  
Code

Accept  
Qty

Reject  
Qty

Reject  
Number

Insp.  
Stamp

160

QC14- Inspect Spray Paint

0.00



QC

Memo

0.00

Quality Control

IT 11-04-21

170

Identify as per dwg & Stock Location: *x tube*

0.00



Packaging

Memo

0.00

Packaging

IT 11-04-21

180

QC21- Final Inspection - Work Order Release

0.00



QC

Memo

0.00

Quality Control

11/4/21 *[Signature]*

MF

11-04-21



W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

# Picklist Print

Monday, March 28, 2011 3:06:18 PM

Page 1

Work Order ID: 67619

Parent Item: D2893-1

Parent Item Name: 2.75 Support



Start Date: 3/28/2011

Required Date: 4/29/2011

Start Qty: 20.00

Required Qty: 20.00

## Comments:

IPP: C 02.11.26 Reformat; Added P/O . KJ  
IPP D 06.04.19 removed alodine EC..  
IPP Rev:E Added priming as per Rev B 07-04-30 JLM  
IPP F 08.03.19 Re-format EC verified by: DD  
IPP Rev:G 08-05-15 add QC14 DD verified by:EC

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
DSK078 		Manufactured	No			100	Each	10.0000	0.5	10		11/04/14	

D2893-1 TURNING DETAIL

## Location

MAT060

64897

## Loc Qty

10

10

## Loc Code

10

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries



<b>DART AEROSPACE LTD</b>		<b>Work Order:</b>	67619
<b>Description: Ø2.750 Support</b>		<b>Part Number:</b>	D2893-1
<b>Inspection Dwg: D2893</b>	<b>Rev: B</b>	<b>Page 1 of 4</b>	

### FIRST ARTICLE INSPECTION DIMENSION SHEET

☒ First Article ☐ Prototype

				Record Actual Dimensions				
Dim	Min	Max	Go/No Go Gauge	1	2	3	4	5
HAAS Section								
AA	2.985	3.005		2.985	2.985	2.995	2.996	2.997
AB	0.440	0.460		.440	.440	.440	.440	.440
AC	0.125	0.160		.143	.140	.140	.140	.140
AD	0.040	0.060		.051	.050	.050	.050	.051
AE	0.188	0.193		.191	.191	.191	.191	.191
AF	0.125	0.160		.140	.140	.140	.140	.140
AG	0.140	0.160		.151	.151	.151	.151	.148
AH	1.360	1.400		1.366	1.368	1.372	1.373	1.372
AI	0.040	0.060		.053	.053	.052	.054	.050
AJ	1.190	1.230		1.212	1.217	1.215	1.212	1.212
AK	0.010	0.020		.015	.015	.015	.015	.015
AL	0.053	0.073		.063	.063	.063	.063	.063
AM	0.240	0.260		.250	.250	.250	.250	.250
AN	2.518	2.538		2.530	2.530	2.528	2.528	2.525
AO	84.39	90.39		87.39	87.39	87.39	87.39	87.39
AP	0.261	0.266		.262	.262	.262	.262	.262
AQ	0.053	0.073		.063	.063	.063	.063	.063
AR								
AS								
AT								
Accept/Reject								

<b>Measured by:</b>	DL	<b>Date:</b>	11/04/12
<b>Audited by:</b>	A.A	<b>Date:</b>	11/04/12
<b>Prototype Approval:</b>		<b>Date:</b>	

Rev	Date	Change	Revised by	Approved
A	02.12.13	New Issue	KJ/RF	
B	07.05.08	Dimension AP revised	KJ/JLM	
C	08.04.21	Reformat	KJ/JLM	

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

DART AEROSPACE LTD		Work Order:	67619
Description: Ø2.750 Support		Part Number:	D2893-1
Inspection Dwg: D2893	Rev: B	Page 1 of 4	

### FIRST ARTICLE INSPECTION DIMENSION SHEET

☒ First Article ☐ Prototype

				Record Actual Dimensions				
Dim	Min	Max	Go/No Go Gauge	16	17	18	19	20
HAAS Section								
AA	2.985	3.005		2.997	2.995	2.995	2.994	2.994
AB	0.440	0.460		.440	.440	.440	.440	.440
AC	0.125	0.160		.140	.140	.140	.140	.140
AD	0.040	0.060		.049	.050	.051	.051	.051
AE	0.188	0.193		.191	.191	.191	.191	.191
AF	0.125	0.160		.140	.140	.140	.140	.140
AG	0.140	0.160		.148	.151	.151	.149	.149
AH	1.360	1.400		1.373	1.373	1.372	1.373	1.370
AI	0.040	0.060		.050	.055	.050	.056	.053
AJ	1.190	1.230		1.212	1.215	1.213	1.215	1.215
AK	0.010	0.020		.015	.015	.015	.015	.015
AL	0.053	0.073		.063	.063	.063	.063	.063
AM	0.240	0.260		.250	.250	.250	.250	.250
AN	2.518	2.538		2.525	2.530	2.530	2.530	2.530
AO	84.39	90.39		87.39	87.39	87.39	87.39	87.39
AP	0.261	0.266		.262	.262	.262	.262	.262
AQ	0.053	0.073		.062	.063	.063	.063	.063
AR								
AS								
AT								
Accept/Reject								

Measured by:	SL	Date:	11/04/13
Audited by:	A.A	Date:	11/04/18
Prototype Approval:		Date:	

Rev	Date	Change	Revised by	Approved
A	02.12.13	New Issue	KJ/RF	
B	07.05.08	Dimension AP revised	KJ/JLM	
C	08.04.21	Reformat	KJ/JLM	



<b>DART AEROSPACE LTD</b>		<b>Work Order:</b>	17619
<b>Description:</b> Ø2.750 Support		<b>Part Number:</b>	D2893-1
<b>Inspection Dwg:</b> D2893	<b>Rev:</b> B	<b>Page</b> 3 <b>of</b> 4	

### FIRST ARTICLE INSPECTION DIMENSION SHEET

☒ First Article ☐ Prototype

				Record Actual Dimensions				
Dim	Min	Max	Go/No Go Gauge	1	2	3	4	5
HAAS Section								
AA	2.985	3.005		2.994	2.993	2.994	2.993	2.994
AB	0.440	0.460		.440	.440	.440	.440	.440
AC	0.125	0.160		.140	.140	.140	.140	.140
AD	0.040	0.060		.050	.050	.051	.050	.050
AE	0.188	0.193		.191	.191	.191	.191	.191
AF	0.125	0.160		.140	.140	.140	.140	.140
AG	0.140	0.160		.150	.151	.150	.150	.150
AH	1.360	1.400		1.373	1.370	1.372	1.373	1.369
AI	0.040	0.060		.054	.056	.053	.053	.053
AJ	1.190	1.230		1.212	1.216	1.216	1.217	1.214
AK	0.010	0.020		.015	.015	.015	.015	.015
AL	0.053	0.073		.063	.063	.063	.063	.063
AM	0.240	0.260		.250	.250	.250	.250	.250
AN	2.518	2.538		2.525	2.525	2.530	2.528	2.530
AO	84.39	90.39		87.39	87.39	87.39	87.39	87.39
AP	0.261	0.266		.262	.262	.262	.262	.262
AQ	0.053	0.073		.063	.063	.063	.063	.063
AR								
AS								
AT								
Accept/Reject								

Measured by: SL Date: 11/04/14

Audited by: BA Date: 11/04/18

Prototype Approval: Date:

Rev	Date	Change	Revised by	Approved
A	02.12.13	New Issue	KJ/RF	
B	07.05.08	Dimension AP revised	KJ/JLM	
C	08.04.21	Reformat	KJ/JLM	

DART AEROSPACE LTD		Work Order:	67619
Description: Ø2.750 Support		Part Number:	D2893-1
Inspection Dwg: D2893	Rev: B	Page 4 of 4	

### FIRST ARTICLE INSPECTION DIMENSION SHEET

☒

First Article

☐

Prototype

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AE	0.188	0.193		.191	.191	.191	.191	.191
AF	0.125	0.160		.140	.140	.140	.140	.140
AG	0.140	0.160		.149	.146	.149	.148	.148
AH	1.360	1.400		1.370	1.371	1.373	1.373	1.373
AI	0.040	0.060		.053	.056	.053	.053	.057
AJ	1.190	1.230		1.218	1.212	1.217	1.215	1.217
AK	0.010	0.020		.015	.015	.015	.015	.015
AL	0.053	0.073		.063	.063	.063	.063	.063
AM	0.240	0.260		.250	.250	.250	.250	.250
AN	2.518	2.538		2.520	2.520	2.520	2.520	2.520
AO	84.39	90.39		87.39	87.39	87.39	87.39	87.39
AP	0.261	0.266		.262	.262	.262	.262	.262
AQ	0.053	0.073		.063	.063	.063	.063	.063
AR								
AS								
AT								
Accept/Reject								

Measured by:	SL	Date:	11/04/14
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Audited by:	BA	Date:	11/04/18
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Prototype Approval:		Date:	
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Rev	Date	Change	Revised by	Approved
A	02.12.13	New Issue	KJ/RF	
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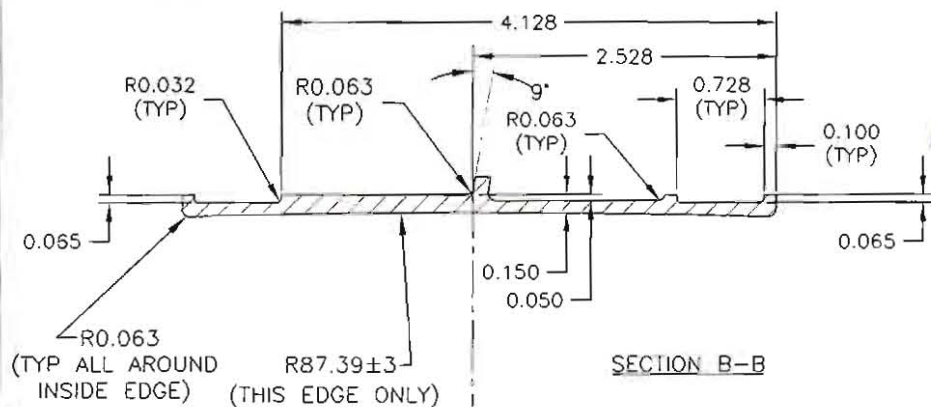
SHOP COPY  
RETURN TO  
ENGINEERING  
UNCONTROLLED COPY

SUBJECT TO AMENDMENT

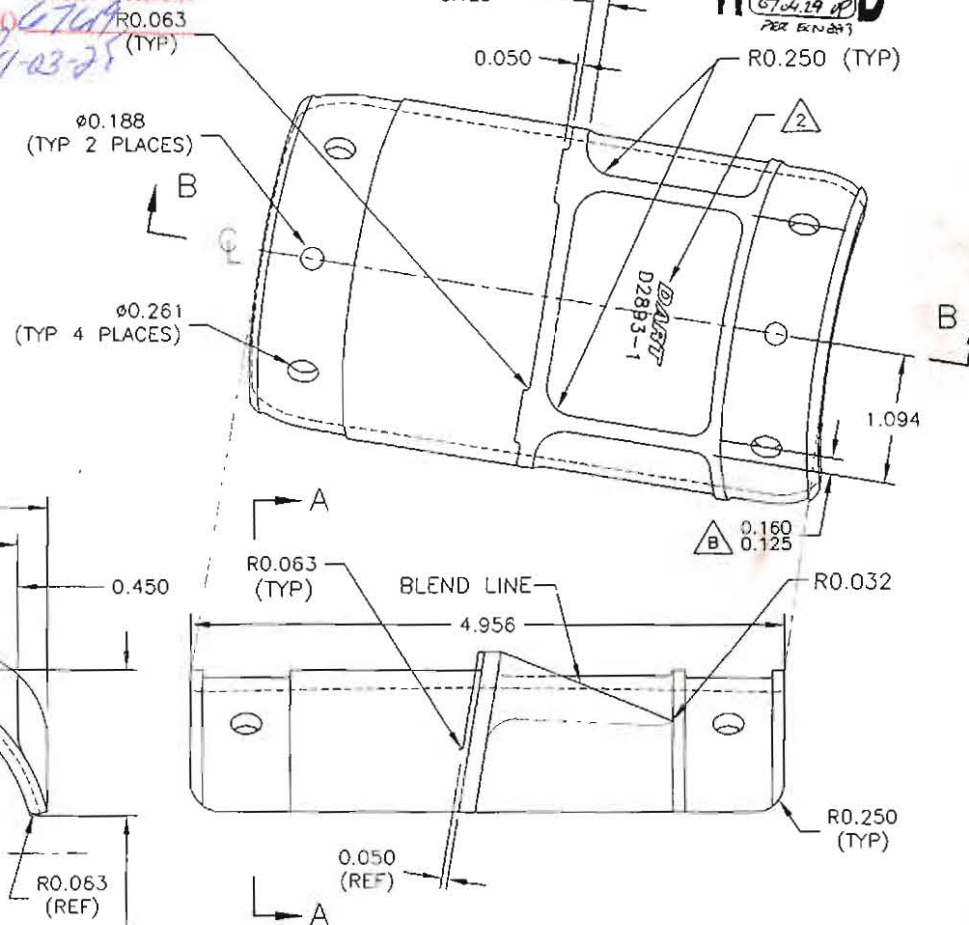
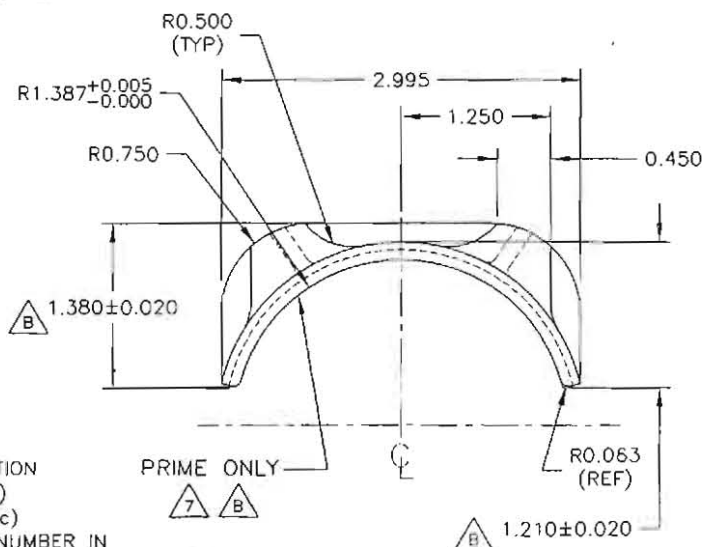
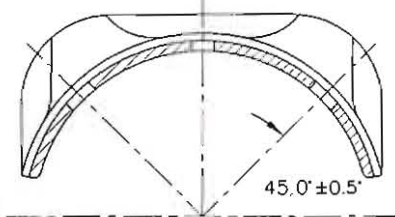
WITHOUT NOTICE  
WORK ORDER

NO. 6769  
D2893-1

RELEASED  
67.4.19  
PER EKN 281



TO CENTER



D2893-1

- 1) MATERIAL: 17-4 PH STAINLESS STEEL  
HEAT TREAT TO H900 CONDITION  
(900°F FOR 1 HR, AIR COOL)  
MIN UTS = 170 KSI (38 HRC)
- 2) IDENTIFY WITH DART LOGO AND PART NUMBER IN  
THIS AREA WITH 0.125 HIGH LETTERING 0.010-0.020 DEEP
- 3) BREAK ALL UNMARKED SHARP EDGES 0.010 TO 0.020
- 4) PART IS SYMMETRIC ABOUT CENTERLINE
- 5) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 6) ALL DIMENSIONS ARE IN INCHES
- 7) FINISH: POWDER COAT WHITE (REF. 4.3.5.2) PER DART QSI 005 4.3  
PRIME INSIDE SURFACE AS SHOWN PER DART QSI 005 4.2

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THAT IT IS NOT TO BE USED FOR ANY PURPOSE  
OR COPIED OR COMMUNICATED TO ANY OTHER  
PERSON WITHOUT WRITTEN PERMISSION FROM  
DART AEROSPACE LTD.

B	07.03.16	UPDATE DIMS AS MFG., PRIME INSIDE
A	01.01.10	NEW ISSUE
DESIGN	97	DRAWN BY PH
CHECKED	H	APPROVED H
DATE	07.03.16	TITLE #2.750 SUPPORT
		DART AEROSPACE LTD. HUNTSBURY, ONTARIO, CANADA
		DRAWING NO D2893
		REV. B SHEET 1 OF 1 SCALE 1:1



W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries